ABSTRACT

The present invention provides a method and apparatus for using user-context information to improve N-best processing in the presence of speech recognition uncertainty. The method includes receiving digitized voice data from a user. Once the voice data is received, the voice data is processed by a speech recognizer to determine one or more phrases recognized as the digitized voice data provided by the user based on the currently active recognition grammar. When more than one phrase is recognized as the digitized voice data provided by the user as a result of voice recognition uncertainty, user-specific context information is used to choose a recognized phrase from the one or more phrases recognized as the digitized voice data. The voice recognition system includes a voice interface to receive the digitized voice data from the user. A voice recognition engine processes the voice data to determine the one or more phrases recognized as the digitized voice data based on the currently active recognition grammar. A database contains context information for users of the voice recognition system. A context sensitive natural language processor has a capability to select user-specific context information from the database and use the user-specific context information to choose a recognized phrase from the one or more phrases recognized as the voice data when the voice recognition engine recognizes more than one phrase as the voice data provided by the user.